**Intellectual Property Record** 

Idea Title: Plasma-Based Orbital Launcher for Light Sail Missions

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**Project Summary:** 

This concept proposes the use of a plasma-based propulsion system stationed in orbit-such as on a

satellite or orbital platform-to provide the initial thrust for a light sail spacecraft. Once the sail

reaches a sufficient velocity, it would continue its journey propelled by solar radiation or directed

laser beams.

Key Features:

1. Plasma Propulsion Booster in Orbit: Reduces need for ground-based heavy launches.

2. Hybrid Acceleration: Initial push by plasma engine, sustained acceleration by light (photons).

3. Efficiency: Launching from orbit avoids atmospheric losses and reduces required fuel mass.

4. Potential Use Cases: Interstellar probes, long-range space cargo missions, future human

exploration.

Advantages:

- Significant reduction in launch weight and energy requirements.

- Feasibility of small-scale probes reaching nearby star systems.

- Scalable system with long-term sustainability in deep-space exploration.

This idea is original and credited to Michael, officially recorded on the date below.

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